

IFW

PATENT ATTORNEY DOCKET NO. 10498-00059

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:			
Donald M. Coen and Beatrice D. Pilger		)	Examiner:
Serial No.:	10/712,785	)	
Filed:	November 13, 2003	)	Art Unit: 2812
	HOD FOR DETERMINING PROTEIN RACTION INHIBITORS	) )	

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

### TRANSMITTAL LETTER

In regard to the above identified application, we are transmitting herewith the attached:

- 1. Information Disclosure Statement,
- 2. PTO Form-1449 (2 pages),
- 3. Copies of twenty-three (23) references, and
- 4. Return postcard.

With respect to additional fees, no additional fee is required. The Commissioner is nevertheless authorized to charge any additional fees or credit overpayment to Deposit Account No. 19-0733.

Respectfully submitted,

Date: October 27, 2004

John P. Iwanicki, Reg. No. 34,628 BANNER & WITCOFF, LTD.

28 State Street, 28th Floor

Boston, MA 02109

Telephone: (617) 720-9600

USSN 10/712,785 Express Mail Receipt No. EV 396915023 US WEASO51605302

PATENT ATTORNEY DOCKET NO. 10498-00059

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:			
Donald M. Coen and Beatrice D. Pilger		)	Examiner:
Serial N	To.: 10/712,785	)	
Filed:	November 13, 2003	). )	Art Unit: 2812
Title: METHOD FOR DETERMINING PROTEIN INTERACTION INHIBITORS		) )	

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

# INFORMATION DISCLOSURE STATEMENT

## Dear Sir:

Pursuant to 37 C.F.R. §§ 1.97-1.99, Applicants hereby submit the enclosed PTO Form 1449. A copy of the United States patent cited herein is not being submitted according to the August 5, 2003, U.S. Patent and Trademark Office Official Gazette Notice regarding Information Disclosure Statement filings. Copies of the remaining references are enclosed. This Information Disclosure Statement is in compliance with the continuing duty of candor as set forth in 37 C.F.R. § 1.56 and is being filed before the mailing date of a first office Action on the merits. Accordingly, no fee is due.

In the judgment of the undersigned, portions of the listed references may be material to the Examiner's consideration of the presently pending claims. However, the references have not been reviewed in sufficient detail to make any other representation and, in particular, no representation is intended as to the relative importance of any portion of the references. This statement is not a representation that the listed references have effective dates early enough to be "prior art" within the meaning of 35 U.S.C. § 102 or § 103.

Please apply any charges or credits to Deposit Account No. 19-0733.

Respectfully submitted,

Date:

october 27,2004

John P. Iwanicki, Reg. No. 34,628 BANNER & WITCOFF, LTD.

28 State Street, 28th Floor Boston, MA 02109

Telephone: (617) 720-9600

#### U.S. Department of Commerce Attorney Docket No. 10498-00059 Serial No. 10/712,785 Patent and Trademark Office Applicants: Donald M. Coen and Beatrice D. Pilger MATION DISCLOSURE CITATION Filing Date: November 13, 2003 Group: 2812 Sheet 1 of 2 **U.S. PATENT DOCUMENTS** Filing Date Patent No. Date Name Class Subclass Initial (if appropriate) 5 AA5,223,391 06/29/93 Coen et al. 435 02/21/90 FOREIGN PATENT DOCUMENTS Examiner Document No. Date Country Class Subclass Translation Initial YES NO WO 00/68185 **PCT** AB 11/16/00 OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.) AC Bridges et al., "Secondary structure and structure-activity relationships of peptides corresponding to the subunit interface of herpes simplex virus DNA polymerase," J. Biol. Chem., 275(1):472-478 (2000) AD Bridges et al., "Identification of crucial hydrogen-bonding residues for the interaction of herpes simplex virus DNA polymerase subunits via peptide display, mutational, and calorimetric approaches," J. Virol., 75(11):4990-4998 (2001) Chow and Coen, "Mutations that specifically impair the DNA binding activity of the herpes simplex AE virus protein UL42," J. Virol., 69(11):6965-6971 (1995) Coen et al., "Sensitivity of arabinosyladenine-resistant mutants of herpes simplex virus to other antiviral AF drugs and mapping of drug hypersensitivity mutations to the DNA polymerase locus," J. Virol.. 53(2):477-488 (1985) Degterev et al., "Identification of small-molecule inhibitors of interaction between the BH3 domain and AG Bcl-xL," Natl. Cell Biol., 3(2):173-182 (2001) Digard and Coen "A novel functional domain of an alpha-like DNA polymerase. The binding site on the AH herpes simplex virus polymerase for the viral UL42 protein," J. Biol. Chem., 265(29):17393-17396 (1990)ΑI Digard et al., "Functional analysis of herpes simplex virus UL42 protein," J. Virol., 67:1159-1168 (1993)Digard et al., "The extreme C terminus of herpes simplex virus DNA polymerase is crucial for ΑJ functional interaction with processivity factor UL42 and for viral replication," J. Virol., 67(1):398-406 (1993)ΑK Digard et al., "Specific inhibition of herpes simplex virus DNA polymerase by helical peptides corresponding to the subunit interface," Proc. National. Acad. Sci. USA., 92:1456-1460 (1995) Digard et al., "Mutational analysis of DNA polymerase substrate recognition and subunit interactions AL using herpes simplex virus as prototype," *Methods Enzymol.*, 262:303-322 (1995) Gottlieb et al., "The Herpes Simplex Virus Type 1 UL42 Gene Product; a Subunit of DNA Polymerase AM that Functions to Increase Processivity," J. Virol., 64(12):5976-5987 (1990)

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant. \*\*Copies of references not provided at the time of this submission.

**EXAMINER** 

**DATE CONSIDERED** 

USPTO Form 144 9		U.S. Department of Commerce Patent and Trademark Office		Attorney Docket No. 10498-00059		Serial No. 10/712,785					
SIPE			Applicants: Donald M. Coen and B		eatrice D. Pilger						
INFORM NON DISCLOSURE CITA Sheet 2 of 2		CITATION	Filing Date: November 13, 2003			Group: 2812					
T30	2 7 200	ECE E	U.S. PATENT I	DOCUMENTS							
Examiner Initial	ADEMAS	Patent No.	Date	Name	Class	Subclass	Filing Date (if appropriate)				
	BA										
FOREIGN PATENT DOCUMENTS											
Examiner Initial		Document No.	Date	Country	Class	Subclass	Translation				
							YES	NO			
	ВВ							-			
	OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)										
	ВС	Gottlieb and Challberg, "Interaction of herpes simplex virus type 1 DNA polymerase and the UL42 accessory protein with a model primer template," <i>J. Virol.</i> , 68(8):4937-4945 (1994)									
	BD			us type 1 DNA polymerase accessory protein, UL42, contains a Gen, Virol., 74 ( Pt 10):2181-2189 (1993)							
	BE	Loregian et al., "Intranuclear delivery of an antiviral peptide mediated by the B subunit of <i>Escherichia coli</i> heat-labile enterotoxin," <i>Proc. Natl. Acad. Sci. USA.</i> , 96:5221-5226 (1999)									
	BF	Marsden et al., "Role of the carboxy terminus of herpes simplex virus type 1 DNA polymerase in its interaction with UL42," <i>J. Gen. Virol.</i> , 75:3127-3135 (1994)									
	BG	Pritchard and Stefano, "Amplified detection of viral nucleic acid at subattomole levels using Q beta replicase," <i>Ann. Biol. Clin.</i> , (Paris) 48(7):492-497 (1990)									
	ВН	Stow et al., "Inhibition of herpes simplex virus type 1 DNA replication by mutant forms of the origin-binding protein," <i>Virology</i> , 196:413-418 (1993)									
	BI	Tenney et al., "Deletions of the carboxy terminus of herpes simplex virus type 1 UL42 define a conserved amino-terminal functional domain," <i>J. Virol.</i> , 67(4):1959-1966 (1993)									
	BJ	Tenney et al., "Mutations in the C terminus of herpes simplex virus type 1 DNA polymerase can affect bonding and stimulation by its accessory protein UL42 without affecting basal polymerase activity," <i>J. Virol.</i> , 67(1):543-547 (1993)									
	BK			organization of herpes sol. Chem., 269(36):22788			olymera	se			
	BL	Weisshart et al., "Herpes simplex virus processivity factor UL42 imparts increased DNA-binding specificity to the viral DNA polymerase and decreased dissociation from primer-template without reducing the elongation rate." J. Virol., 73(1):55-66 (1999)									
	ВМ		crystal structure of an unusual processivity factor, herpes simplex virus UL42, inus of its cognate polymerase," <i>Mol. Cell.</i> , 5:267-278 (2000)								
EXAMINE	R				DATE CO	ONSIDEREI	D				
*EVANDIED.	Initial IC.	-6		acquith MPED 600 Drow line th	varrah aitatian	if not in confo		d not			

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.\*\*Copies of references not provided at the time of this submission.